
Listening to Young Children Talking on the Telephone: a reassessment of Vygotsky's notion of 'egocentric speech'

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ABSTRACT In this article the author explores aspects of young children's private speech, examining characteristics of their development of discourse knowledge in utterances that are not directed to actual conversants. Two routes are taken, which the author tries to interlink without seeking a hard and fast juncture. The first is a study of what children are doing when they talk into a toy telephone, with reference to a transcript taken from empirical research. Knowledge of the essential structure of telephone discourse is displayed, as are emotional motivations behind the construction of pretence talk. The second is the notion of 'egocentric speech' as coined by Piaget and developed, within his sociocultural perspective to language acquisition, by Vygotsky. The author argues that dominant contemporary presentations of Vygotsky's notion of 'egocentric speech' tend to stress the self-regulatory or planning function at the expense of its role in expression of the imagination. The two discussions come together in the suggestion that the deployment of the imagination in reassembling sociocultural knowledge for the creation of pretence play, sometimes expressed in private speech, can be a significant factor in the exercise of discourse competencies for young children.

Introduction

One December day, Katie, 3 years and 11 months old, walked into a child-sized telephone box situated in the nursery that she attended each weekday morning. It was near the end of a period of free-choice activities. But the time had come to clear up, prior to the well-organised routine of having a snack,

visiting the cloakroom and the other whole-group activities which curtailed the morning at pre-school.

As a language development researcher spending 9 months in the nursery gathering data on children's interactions with toy telephones, I was later able to play back the video recording of what Katie said. It was not particularly remarkable in having any single unusual feature; but, as ethnomethodologists such as Sacks, Schegloff & Jefferson (1974) have demonstrated, unravelling small pieces of discourse that at first sight seem relatively mundane can be highly rewarding in discovery of their underlying complexity of organisation.

Katie's Pretence Telephone Call

The time is given in minutes and seconds, followed by Katie's speech and (in italics) Katie's action.

- 0.00 *dials*
- 0.01 *picks up receiver*
- 0.02 Mummy, I'm tidying up now and I want to play. Goodbye.
- 0.07 *almost hangs up; then lifts receiver*
- 0.08 *dials (for approx. 2 seconds)*
- 0.10 Hello
- 0.11 *dials (for approx. 4 seconds)*
- 0.16 Hello yeh bye. Mummy's poorly bye
- 0.19 *hangs up*

In looking at the data collected for my research on children's pretence and actual dialogic telephone talk I became interested in considering some aspects of it in the light of Vygotsky's (1987b) notion of 'egocentric speech'. I shall be looking at this idea in detail, but initially adumbrate the notion. It is important to explain that Vygotsky was here working with a term coined by Piaget (1959). Therefore, although he disagreed that 'egocentricity' was a characteristic of the phenomenon, he continued to use the phrase (and so shall I), while carefully maintaining suspicious quotation marks around it. Many later writers on 'egocentric speech', whether working from Piaget's theories or endeavouring to take into account Vygotsky's, find that the phenomenon is something of a broad term: talking apparently to oneself but very probably in the presence of other(s). Piaget (1959) immediately divided this phenomenon into three categories, as discussed later. Study of 'egocentric speech' has been found useful by many researchers of children's language development (see Diaz & Berk, 1992 for a review). In particular, Berk, as reported in her 1992 overview of many years' research in the USA, has studied the talk of children at school talking to themselves while accomplishing tasks. In this context, she relabelled 'egocentric speech' as 'private speech'. The age range studied is from 4 to 10 years, and Berk's particular emphasis is speech-accompanying activities that present a cognitive challenge. Shields's (1979) British study was of the natural language of nursery school children playing and showed that

any cognitive challenges arise spontaneously and are presented by/to the self rather than being initiated by the teacher and/or researcher. In addition, the presence of peers is often significant. These differences receive further attention later in the article.

It is important to state that in this article my aim is not to reach an overall explanation of data in terms of either Piaget's or Vygotsky's notion of 'egocentric speech', however modified. Neither am I trying to achieve a definitive resolution of the notion of 'egocentric speech' through appeal to data. Rather, as Berk and Shields have attempted in their very different ways, I bring my reading of data of young children's talk that is not obviously directed to another person, that has been collected in a particular context (in my case in play with telephones), and place this with an exploration of Vygotsky's theories concerned with 'egocentric speech'. I do this in the hope of enhancing our overall understanding of children's discourse development.

Study Design

Before discussing further 'egocentric speech', I explain part of the rationale behind the study in which Katie's call was produced. How children learn to talk on the telephone has been a rarely investigated area, in contrast to how they manage other arenas of communicative competence such as talking to caregivers or becoming literate. Yet, the telephone does offer a site of particular interest. It is ubiquitous in modern life and children are partially aware of its function from infancy (Bretherton, 1984). The telephone offers a particular challenge to the young child who has invariably developed language in face-to-face situations, where both non-verbal cues and a shared environment can facilitate the communicative process, along with the deployment of linguistic resources. Research into young children learning to talk on the telephone concentrates almost entirely upon dialogues between young children and adults obtained under artificial conditions (Holmes, 1981; Veach, 1981; Bordeaux & Willbrand, 1987; Warren & Tate, 1992; Cameron & Lee, 1997; Cameron, et al, 1997).

A stimulating and relatively holistic approach to the issue of the acquisition of telephone discourse was provided by Mininni (1985). Although very small scale and limited in coverage, this study was inspirational to me in its joint focus upon children's naturalistically obtained telephone conversations and their earlier or overlapping spontaneous pretence play with toy, or actual, yet unconnected phones. Mininni's suggestion that children displayed very competent, albeit one-sided, 'participations' in telephone discourse in pretence mode before they were able to converse with equally fluent use of linguistic resources in dialogue, led me to study telephone talk as emerging in pretence play and evolving in actual telephone dialogue. Pretence play has a central role in many accounts of child development (Kohlberg & Fein, 1987). Especially relevant to my study have been Vygotsky's (1967) notion of pretence play as a sphere where children aspire to and even practise skills they are not yet

allowed to demonstrate in the arena of adult social life, children's creativity in the construction of roles and narratives (Garvey, 1977), and the consequent development of sociolinguistic competencies (Andersen, 1990).

Data were collected from spontaneous play with telephones during sessions of pretence play by 3 and 4 year-old children in a nursery attached to a school in Lancashire. I also spent considerable time observing, and sometimes participating in, other activities in the nursery. I recorded and later transcribed the telephone talk of 19 children in the 'afternoon group', who were at the nursery throughout the three phases of the study from November 1995 to June 1996. In the first phase, an unobtrusive small video camera was mounted in a child-size replica of a typical British pavement telephone box with a telephone installed in it. The activity of the children in and around the telephone was recorded.

Heeding Bronfenbrenner's (1979) criticisms of overly artificial designs for studies of child development, I claim a considerable degree of 'ecological validity' for the study. Although the study was not naturalistic in that the researcher contrived the situation, it was in the nature of opportunity offered to the children within which they could choose whether or not, and how to participate. Following the example of such research into young children's development of new communicative competencies, as described by Robinson et al (1981), it was felt necessary that the children's parents and teachers considered the opportunity potentially beneficial. The research design was constructed with regard to fitting in to the classroom routine and facilities, to the 'human sense' that was made of it by the children (Donaldson, 1987) and to allow sensitive, long-term observation of the children in their own worlds (see Corsaro, 1985; Hammersley, 1994). It permitted micro-genetic observation of the activity of children acting with peers and/or adults that was a feature of Vygotsky's (1962, 1987a) work, but was underpinned with the careful discourse analysis of contemporary developmental sociolinguistic studies of pretence play (e.g. Andersen, 1990).

The Notion of 'Egocentric Speech'

Piaget's proposal of the notion of 'egocentric speech' (1959) is well known. He suggested that much of the talk young children utter, which is apparently not directed to another as with adult conversation, is 'egocentric' in character:

[The child] does not bother to know to whom he is speaking nor whether he is being listened to. He talks either for himself or for the pleasure of associating anyone who happens to be there with the activity of the moment. This talk is egocentric, partly because the child speaks only about himself, but chiefly because he does not attempt to place himself at the point of view of his hearer. (Piaget, 1959, p. 9)

He distinguished three categories of 'egocentric speech': repetition or echolalia, collective monologue, and monologue or 'soliloquy'. Research in

the 1970s reviewed by Shields (1979) effectively reclassified the first category as social play, and Shields herself convincingly argued from her own data that 'collective monologue' is essentially social: for example, a manifestation of the child learning to cope with the social problem of entering a new type of group dynamics such as peer play in a nursery setting. This leaves the kind of 'egocentric speech' that Piaget (1959) described as follows: 'The child talks to himself as though he were thinking aloud. He does not address anyone' (p. 9). It might be asserted that this can have nothing to do with (pretence) talking on the telephone, a deliberate fantasy activity in which children delight in *addressing* an imaginary interlocutor. However, I contend that if the Vygotskian view of 'egocentric speech' is taken on board, then the activity of 'pretence talking on the telephone' takes on a new significance.

Followers of Vygotsky have grasped an essential difference between Piaget's and Vygotsky's conception of 'egocentric speech', founded upon the radical contrast in their depictions of the young child (see, for example, Berk, 1994; Wertsch & Stone, 1985). For Vygotsky, the genesis of the higher psychological functions including language is in social activity. Language is used to and in the presence of the child. Processes of communication including language are rooted in social interactions. Gradually their meanings are internalised and comprehended linguistically as the child strives actively to make more precisely known her or his concerns and intentions within present social relations. 'Egocentric speech' develops from an undifferentiated social speech as the child moves toward the later-achieved differentiation of inner speech (verbalised thought) and external, communicative speech function (Vygotsky, 1987b, pp. 74, 113). At the age of 3, therefore, there is little difference between 'egocentric' and communicative speech, whereas by age 7, the former is adopting many of the structural characteristics of inner speech and thus is easily perceived by observers as very different from directed conversational speech (Vygotsky, 1987b, p. 261). For Piaget, 'egocentric speech' atrophied as the child developed into a social being, while for Vygotsky it 'went underground' and evolved into inner speech (Wertsch & Stone, 1985, p. 172). Vygotsky himself suggested that it is as absurd to imagine that 'egocentric speech' dies out, as it is to imagine that the ability to count vanishes when the child no longer uses fingers or utters numbers aloud (Vygotsky, 1987b, p. 261).

Vygotsky's own series of experimental investigations (as described in Vygotsky 1962, 1987a; Vygotsky & Luria, 1930) remain particularly persuasive demonstrations of the social nature of 'egocentric speech'. He measured young children's output of 'egocentric speech' while engaged in activities in changing conditions. He agreed with Piaget (1959, p. 9) that children have a certain 'illusion of understanding', that is, with reference to the present 'audience', but showed how important this was to the motivation behind 'egocentric speech'. When the 'audience' was interfered with, for example by being composed of children the subjects knew to be deaf or not speaking their language, or when vocalisations were drowned out by an orchestra recruited

to play on the other side of a screen (!), or simply if a subject child is left alone, then the production of 'egocentric speech' fell sharply. Thus, Vygotsky's emphasis on the social characteristic of all language in use has received considerable empirical support.

Vygotsky's notion of 'egocentric speech' is founded in a conception of the acquisition of language as essentially sociocultural, in contrast to the Chomskian/nativist emphasis on an innate language capacity unfurled through maturation with exposure to a specific language (see, for example, Pinker, 1994). However, beyond its place within a sociocultural account of language development, further refinement of the notion of 'egocentric speech' has happened in a very particular and, I contend, ultimately somewhat misleading way. Part of Vygotsky's account has been seized upon in an unbalanced way and another part left behind.

The function of 'egocentric speech' that is now taken by those who are applying and even developing Vygotskian ideas, as principal, dominant or even essentially sole, is that of a self-regulatory or planning function. I give two examples taken from often-cited Vygotskian research programmes.

In a passage in which Wertsch & Stone (1985) interpret Vygotsky's notion of 'egocentric speech', they seemingly have room for no other aspect of function:

Vygotsky argued that the reason for the appearance of this intermediate speech form is that this new self-regulative function of speech is still not completely differentiated from earlier social functions. The failure to appreciate the existence of this new speech function leads the child temporarily to continue using overt, self-regulative speech and to produce such speech in potentially communicative settings. (p. 172)

Wertsch's (1985) application of Vygotsky's theories to the study of adult-child dialogues is renowned. It is interesting to note that although studies of adult-child dyads frequently cite his work, Vygotsky himself 'never discussed these situations and instead focused more upon culture as providing tools for thinking' (Van der Veer & Valsiner, 1994, p. 6). In the chapter co-written with Stone cited earlier, Wertsch presents an excellent demonstration of how mother-child problem-solving dialogue of directed speech becomes internalised into the child planning for herself or himself through the intermediate stage of 'egocentric speech'.

This is the 'private speech' that Berk and her fellow contributors to the 1992 volume *Private Speech: from social interaction to self-regulation*, studied. As is clear in the title and discussed within the book, Diaz & Berk consider their notion of private speech as self-regulatory to be synonymous with Vygotsky's 'egocentric speech'. In studies spanning more than a decade, Berk (1992, 1994) focused on the link between talking to oneself and learning, stressing the idea that self-regulatory or planning speech can be a useful accompaniment to a difficult task, a resource even for adults. Berk (1992, 1994) addressed such questions as: do slow learners use more or less 'private speech' than quick

learners; do some cultural groups tend to use it more or less than others; and should we respond to any such difference with intervention? These are worthwhile areas of enquiry.

My intention is to focus on Berk's notion of 'egocentric speech' as a reflection of Vygotsky's, as it is a relationship that Berk claims. Berk (1994) says that 'self-guidance is the central function of private speech' (p. 62) and cites Vygotsky for her argument that 'private speech facilitates self-regulation' (p. 63). Her evidence occasionally includes other, quite different roles that private speech can play including 'fantasy play' and 'emotional release', but it is as an accompaniment to action, a form of self-direction that she and Wertsch & Stone (1985) consider to be of prime importance. What a surprise, then, to find that Vygotsky (1987b) actually wrote of 'egocentric speech': 'It is not an accompaniment of the child's activity' (p. 259). What is the explanation for the apparent contradiction here?

It is true that in their writings Vygotsky and indeed Piaget stressed the aspect of 'egocentric speech' that is self-regulatory and indeed some kind of a commentary on action. This led to an emphasis by followers (including early translators of Vygotsky) on this function. However, I suggest that this aspect received particular attention because of the comparative novelty of the suggestion. This was the era when both men were drawing on each other's work with mutual respect and it is useful to remember the long shadow cast over all serious students of child psychology by Freud. In relation to Piaget, this influence is emphasised by Kohlberg & Fein (1987, p. 393) and in relation to Vygotsky, received its clearest acknowledgement in his short piece written with Luria (Vygotsky & Luria), made available in 1994. The internal life of the child in imagination and the significance of unconscious impulses were greatly appreciated by the 1930s (as in the present day, considered necessarily inaccessible to precise, quantifiable research methodologies). Reading Vygotsky's extensive writings on 'egocentric speech', I find a more well-rounded account than in the selective presentations of Berk (1992, 1994) and Wertsch & Stone (1985), who have tended to regard the ideas of Piaget and Vygotsky as requiring less justification in their discussions of 'egocentric speech'. In many passages, Vygotsky passes quickly over an acceptance of the imaginative, expressive nature of 'egocentric speech' in order to present the comparatively newly recognised aspect of a sometimes present self-regulatory function:

Egocentric speech may, in fact, function as a component of realistic thinking.

Egocentric speech may be fused not with the logic of dream or fantasy but with the logic of rational, goal-directed action and thinking. (Vygotsky, 1987b, p. 73)

This second type of 'logic' received most attention by Vygotsky as previously having been overlooked. Later commentators follow his line of emphasis, identified in passages such as:

Alongside the purely expressive function of egocentric speech, its tendency to simply accompany the child's activity, this process becomes thinking in the true

sense of the term. It assumes the function of a planning operation or the function of resolving a problem that arises in behaviour. (Vygotsky, 1987b, p. 114)

Therefore, attention to ‘the logic of dream and fantasy’, and ‘the purely expressive function’ of ‘egocentric speech’ came to be overlooked. Much of Vygotsky’s writing on ‘egocentric speech’ emphasises the role of ‘egocentric speech’ in accompanying cognitively challenging activities. Moreover, this path has been developed so fruitfully by Berk, as discussed earlier.

However, Vygotsky’s (1987b) clearest summary passage paints a more holistic picture of the role of ‘egocentric speech’:

the function of egocentric speech is closely related to the function of inner speech. It is not an accompaniment of the child’s activity. It is an independent melody or function that facilitates intellectual orientation, conscious awareness, the overcoming of difficulties and impediments, and imagination and thinking. It is speech for oneself (a speech function that intimately serves the child’s thinking). The genetic fate of egocentric speech is much different from that depicted by Piaget. Egocentric speech develops along not a falling but a rising curve. Its development is not an involution but a true evolution ... Our hypothesis suggests that egocentric speech is speech that is internal in its mental function and external in its structure. It is fated to develop into inner speech. (pp. 259–260)

Pretence Telephone Talk

A return to the data is surely overdue. Before any analysis of the content of what Katie says, I need to consider whether the phenomenon of pretence play with a telephone in the context of a discussion can be seen as ‘egocentric speech’. If Vygotsky’s analysis is accepted, then the data are of a highly relevant nature.

If a young child picks up a telephone and plays with it, then it is not *necessary* to speak into it. As one might expect from Vygotsky’s emphasis on the sociocultural nature of language acquisition, children have been observed vocalising ‘correctly’ (i.e. making sounds only when holding the telephone up near the head, directing noise in the area of the mouthpiece) from as young as 14 months old. I have a video recording of such a child, Laura (Gillen, 1997a), playing in this way with a telephone for the duration of over 1 minute. Later, when children clearly understand the communicative function of a connected telephone and differentiate their own toy from which no voice will ever emerge, they choose to couch their pretence talk in the framework of telephone discourse. The data from this study revealed knowledge of the anatomy of telephone calls drawn upon in pretence and dialogic constructions (Gillen, 1998). The most necessary elements of telephone discourse: openings, closings and signs of turn-taking, (Schegloff & Sacks, 1973; Schegloff, 1979; Hopper, 1992) appear early and continue to structure later talk until and long after it becomes as complicated as Katie’s.

Katie's pretence telephone call is rare amongst data collected in this study in that it does not begin with 'hello' or 'hiya'. As with most such calls, further examination does reveal recognition of the need for an opening in more than one way. For Katie's opening 'Mummy' has something in the nature of the vocative about it, the address that can begin a speech directed to another (as particularly clearly evidenced in Latin with its use of the vocative inflection). After she has made a contentful statement, Katie brings the call to a close with 'goodbye' and prepares to replace the receiver. As was the case for a number of children in other pretence calls, preparing to replace the receiver seemed to trigger a self-correction; a realization that the rapid delivery of the strongly motivated 'message' caused an omission of the proper preliminaries. The use of the 'vocative' is now felt to have been not quite an adequate opening. Accordingly, Katie started again, lifting the receiver and dialling (again a virtually ubiquitous precursor to a pretence call).

This time she says 'Hello', dials again and makes what I came to regard as the canonical short pretence call: beginning with 'Hello', ending in 'bye', with merely monosyllabic phatic acknowledgements or signs of turn-taking in between (I borrow the notion of a canonical call from Hopper's 1992 inductively derived work on canonical constituents of adults' telephone calls). In a sense, her mission of making a pretence telephone call is now complete. On many occasions, pretence calls of this nature and structure seemingly satisfied the children's impulses. However, on this occasion, something else came to the front of her internal life that required final expression. I am not going to be so literal minded as to assert that Katie's mother was necessarily ill at that time and that Katie was expressing her real anxiety. It seems to be that pretending to talk *to* her mother has brought the figure of her mother firmly into her imagination and she ended expressing a thought *about* her. Mothers were very frequently the characterisations evoked as imaginary interlocutors and this occurred almost automatically, even if the call contained only the basic structural elements identified earlier.

Here I think it very possible that Katie's original motivation to express herself came from her recognition of the fact that 'tidy up time' had come, the precursor of activities connected with getting ready to go home, while she felt somewhat frustrated in the curtailment of her play activities. The pretence telephone offered a stimulus to her to express this idea – and emotion – verbally: a kind of encouraging force or even amplifier (and literally so) of 'egocentric speech'.

Sociocultural knowledge of the structure of telephone calls is brought into the structuring of expression in pretence telephone calls. The socially conventional routines of telephone discourse, the dialogic skills of turn-taking and addressing, even responding to the other, and not least the imaginative and emotional evocations and activities belonging to the realm of pretence play become the resources that children draw upon when constructing telephone talk. Katie's 'call' is perhaps two or more attempts at making a call, each with its opening, closing and some appropriate mid-part. Her pauses, the

construction of her turns, are at least as significant an achievement as the semantic content of her utterances, in interactional terms. Children re-create the communicative routines they link to recognised contexts, often pushing the boundaries of their pre-existing linguistic abilities as they do so (Bloom, 1993; Gillen, 1997a). The act of the 14 month-old Laura in lifting the telephone receiver and vocalising into it, a sound that will soon become 'hello', is a manifestation of children actively making use of resources given substance and form by the culture around them.

Conclusions

Whether it is fair to judge pretence calls as exemplars of 'egocentric speech' or not does not finally matter too much. I have made a case that pretence telephone calls may be regarded in this light. Talking on a telephone that the child knows will bring about no actual response is a kind of performance for oneself. Thus, explanations of pretence calls as manifestations of 'egocentric speech' can make use of Vygotsky's account of the social genesis of speech.

Analysis of children's talk to themselves, while allowing them to maintain control over that world, has the potential to illuminate their route to communicative competence in a holistic way. This 'egocentric speech' involves more than either the acquisition of particular routines or the overcoming of cognitive challenges, important as these are. 'Egocentric speech' is constituted by the expression of the child's imagination in an environment that is profoundly coloured by subjective perceptions and relationships, and given potential forms through culturally derived interpretations.

The reader might prefer a weaker case, in which I succeed in drawing some links between the manifestations of pretence play that I studied and 'egocentric speech'. In this event, I can draw attention to something of a possible bridge in the work of Shields (1979), who studied 'egocentric speech' as it arose in the course of spontaneous play among pre-schooler children. She characterised imaginative monologues (i.e. Piaget's category of 'monologue' [soliloquy]; see earlier), as follows:

The monologues seems [sic] to be typical examples of elaborated play in which the experiences of reality are brought in to structure the current activity. This process may take place in play interaction, or it may be exhibited as in these monologues entirely under the control of the child. (Shields, 1979, p. 265; my emphasis)

These words are an apposite description of what I found in the children's telephone calls, across both the pretence and dialogic conditions. How socially oriented any utterance might be deemed was a far more complex issue than simply whether or not the telephone was connected to another person. Katie almost automatically addressed her mother in her pretence call. This then brought that figure into the foreground of subject matter, demanding some

kind of expression. Shields's formulation brings out the interaction between the 'pretence' and the 'real' world as they are brought together in the unified (in another sense) existence of the child and suggests how speech routines of culturally defined discourses, here telephone discourse, are used as essential linguistic resources. For these are the structuring experiences of reality, as they appear in language.

Pretence calls, as 'egocentric speech', may occur in the presence of adults. However, neither are they elicited nor under adults' control. They belong to the child, and sometimes, to the world of pretence play they inhabit with peers. Having regard to children's private speech hardly fits the current emphasis in the United Kingdom pre-school system upon children's *output*, upon their successfully achieved communications, with adults above all.

It is often believed that Vygotsky's work did not reach the West until the 1960s, and is essentially 'true' in that attention slowly started to build after the initial publication of an English translation of *Thought and Language* in 1962. It has generally been overlooked that in 1929 Vygotsky sent a report on his investigations into 'egocentric speech' to the Ninth International Congress of Psychology at New Haven, concluding: 'We thus consider egocentric speech as one of the most important processes having a specific function in the evolution of the cultural behavior of the child' (Vygotsky & Luria, 1930, p. 465).

Note

An earlier version of this article was presented to the British Educational Research Association annual conference in Belfast, August 1998. I am grateful for useful subsequent discussions and suggestions from Ian Stronach, Nigel Hall, the *CIEC* editors and two anonymous reviewers.

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